

Positive affect and reward: examining emotional and motivational influences on cognitive control using pupillometry.

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Affective influences can contribute strongly to goal-oriented behaviour, but much work is still needed to characterize these influences and the mechanisms by which they contribute to cognition. An important question concerns the nature of emotional manipulations (i.e., induction of valenced subjective experience) versus motivational manipulations (e.g., performance-contingent incentives) and their impacts on cognitive control. Although both kinds of manipulations may influence cognition, theoretical accounts are unclear of how closely these emotional and motivational influences relate, and investigations of both have largely been conducted independently of one another. The present study investigated whether positive emotion and reward have distinct effects on cognition (relative to neutral emotion and baseline, respectively), using task performance and pupillometry to index shifts in cognitive control dynamics. Preliminary results indicate that reward may promote proactive control while positive emotion does not, suggesting dissociable influences. Further, the impact of individual differences on these control shifts was explored.